

First Discovery of Triassic Bryozoans in the USSR,
by V. P. Makhovoshev.

RUSSIAN, per, Dok Ak Nauk SSSR: Geologiya, No 3,
1949, pp 459-461.

Dept of Interior
QE3 E57 No 102

Sci - Biol

Jan 63

219,222

Winter Transfer of Heat From the Ocean and
Effective Back Radiation When the Surface of the
Continent is a Complex Structure, by V. V.
Shayleykin.

~~Russian~~, per, Dok Ak Nauk SSSR, No 2, pp 351-354.
RUSSIAN,

NLL 3886

Sci - Nuc Sci & Tech
Earth Sci & Astron
Mar 63

225,426

Surface Tension and Heat Vaporization of Metals,
by S. N. Zadumkin, 7 pp.

RUSSIAN, per, Dok Ak Nauk SSSR,

ABC JPLAI Tr-16

Sci - Min/Met
May 61

150,376

Computation of Vertical Gradient of Gravity from
a Known Distribution of Gravity Anomalies on a
Surface of any Shape, by O. M. Raspopov, 10 pp.
RUSSIAN, Per, Doklady Akad. Nauk SSSR, 1929,
pp 101-105. P942178868
DRB-T-493-R

USSR
Sci/Astronomy
Jul 68

357,060

NTC

DOKLADY AKADEMII NAUK SSSR

1934 V3 P255-258 70-23760 (*)
 1935 V1 P490-493 70-22844 (*)
 1941 V32 P551-554 70-20907 (*)
 1941 V33 P408-411 70-20903 (*)
 1943 V38 P241-242 70-23675 (*)
 1943 V39 P261-264 70-20904 (*)
 1943 V39 N1 P11-14 5828.4F(7854) (NLL)
 1944 V44 P152-153 70-22910 (*)
 1947 V57 P69-72 70-22052 (*)
 1947 V57 N1 P69-72 PU-186 095T (2)
 1948 V59 P1457 70-20912 (*)
 1948 V59 N3 P489-492 70-20913 (*)
 1948 V60 N7 P1293-1296 3630.48(180) (NLL)
 70-11862-06C (*)
 1948 V61 N2 P285-288 70-22614 (*)
 1948 V61 N4 P765-768 3630.48(179) (NLL)
 70-11860-06C (*)

Dr. (Doklady)

196, 1788 (1933)

Separation of Elements 88 (Ra), 89 (Ac) and
90 (Th) with Aid of Organic Solvents

M. M. Kharasinsky

AEC 2. 322

See 1950 listing.

A New Synthesis of Acetylpropyl Alcohol, by
I. L. Knunyants, G. V. Chelintsev, E. D. Osetrova,
5pp
RUSSIAN, per, Doklady, Akad Nauk SSSR, Vol 1,
1934, No 6, pp 312-314
SIA TT-64-16728

Sci - Chem
June 67

328,938

Visible Luminescence of Pure Liquids Under
the Influence of γ -Radiation, by P. A.
Cherenkov.

RUSSIAN, thrice-mo per, Dok Ak Nauk SSSR,
Vol II, No 8, 1934, pp 451-454.

Assoc Tech Sv RJ-539
\$4.80

Sci - Physics
Apr 1957 CTE/dex

46.789
T-107
REC 0350

Theory of Surface Ionization on Glowing Metals,
by A. I. Ansel'm,
RUSSIAN, per, Dok Ak Nauk SSSR, Vol III, 1934,
pp 329-334.
NASA TT F-478

Sci-Phys
Jul 67

331,688

A New Device for Measuring Solution Vapor Pressure
by the Dew-Point Method, by B. B. Kudryavtzev, 2 pp.

RUSSIAN, per, Dok Ak Nauk SSSR, Vol III, 1934,
pp 601-602.

SLA/R-2495

Sci
Apr 59

84,879

Recent Russian Papers Relating to the Characteristics
of Shale-oil Fractions, 93 pp.

RUSSIAN, per, Doklady Akad. Nauk SSR, Vol. III-V.

SLA Tr R-1187

Sci

Jun 58

65,919

Balandin, A. A., Eidus, Ya. T., and Zalogin, N. G.
ON THE FORMATION OF BUTADIENE AND ACET-
YLENE BY THE ACTION OF HIGH-FREQUENCY
DISCHARGES ON ETHYLENE. [1961] 7p. (1 graph
refs. omitted)

Order from OTS or SLA \$1.10

61-20935

Trans. of Akademiya Nauk SSSR. Doklady, 1964, v. 4,
[no. 1/2] p. 132-135.

DESCRIPTORS: Butadienes, Acetylenes, Electric
discharges, High frequency, Ethylenes.

(Unannounced)

61-20935

I. Balandin, A. A.
II. Eidus, Ya. T.
III. Zalogin, N. G.

Office of Technical Services

Isomerization of Hydrocarbons. I. Chlorination of the Isomers of Hexane and Octane with the Aid of Antimony Pentachloride as a Method for their Quantitative Determination, by B.L. Moldavskii and S.E. Livshitz.

RUSSIAN, per, Dok.Ak.NaukSSSR, 1935, vol.1, pp.507-513.

SLA-TT-64-18568

Chem
Aug 66

7
308,627

WITH PHASIC DEVELOPMENT

Timofejera, M. T.

FROST RESISTANCE OF WINTER CEREALS IN CONNECTION
AND HARDENING OF PLANTS.

Comp. R. Acad. Sci. URSS, Vol. 1, pages 61-67, 1935.

★ PL 480
ARS

Apr 61

The Possibility of Contact Between Probabilistic
Theory and Academician I. P. Pavlov's Doctrine
of Conditioned Reflexes, by N. A. Ponomarev

RUSSIAN, per, Dokl Akad. Nauk SSSR, Vol. 7, No. 1
1935, pp 193-199.

MLL RTS 1859

61-19956

124,944

Sci - Phys

Gen 62

COLLOIDAL PHYSICO-CHEMICAL METHODS FOR THE
SEPARATION FROM THE CARBIDES OF SLAG
INCLUSIONS PRECIPITATED FROM STEEL, BY
S. M. GUTMAN, ET AL.

RUSSIAN, PER, DOK AN NAUK SSSR, VOL 1,
1935, PP 308-312.

NLL M.3415

SCI - CHEM, M/M

JUN 62

100,147

R-5697-D
12 Aug 65

Method of Reduction to Ordinary Diff. Eqs.

By: L. V. Kantorovich

From: Akad Sciences USSR, V. 2, #9, 1934 pp 534-536
D.L. (4 pp)

French - est for wds:

Type one camera ready copy. Reproduce for paste-up.

The Catalytic Effect of Mercury Vapor
on the Cracking of Methane in the
Glow Discharge, by N. I. Kobozev,
S. S. Vasil'ev, E. K. Gal'braikh, 9 pp.
RUSSIAN, per, Doklady Akademiya
Nauk SSSR. ~~Complete Edition~~
Vol 2, 1935,
pp 236-240.
K-H 1385 a

336,345

Sci
Aug 67

Saprygina, E. S.
FROST RESISTANCE OF SPRING WHEATS
Comp. Rend. (Doklady) Acad. Sci. USSR, Vol. 3,
pages 325-28, 1935.

RUSSIAN.

★ PL 480
ARS

Apr 61

Reduction of Nitro Compounds by Cast-Iron
Turnings, by V. O. Lukashevich, M. A. Voroshilova,
10 pp

RUSSIAN, per, Dok Ak Nauk SSSR, Vol VII, No 5-6,
1935, pp 394-397.

CIA/FDD/X-1608

Scientific - Chemistry Apr 55 CTS

22,844

Specific Volume of Fused Silica at High Temperatures,
by M. P. Volerovich, A. A. Leont', 3 pp.

RUSSIAN, per, Dok Ak Nauk SSSR, Vol II, 1935, pp
539-541.

SLA R-3362

Sci

Aug 59

93, 615

Dok Ak Nauk SSSR Vol I, page 12-4 (1936)

Color of Corundum, by I. I. Islamov and Yu. M.
Tolmachev.

AEC Trans (avail. Brookhaven)

CR (Dahlady) 2(11), #4(90) (1936)

The Centene Scale and Induction Period Pre-
ceding the Spontaneous Ignition of Diesel Fuel
in Bombs.

M. N. Melikidze
M. B. Weiman

HEC Trans. 269
Osnit @ Brookhaven

Radar Observations of Venus in the Soviet
Union in 1964. by V. A. Kotel'nikov.
Yu. N. Aleksandrov, et al.
RUSSIAN, per, Doklady Ak Nauk
SSSR, Astronomiya, Vol XVI, No 1,
pp 50-53. P-910037565
NASA TT F-9693

Sci-Navigatoon, Communications
Detection and Countermeasures,
Sept 66 309,808

Chkalovite. Denver, U.S. Geological Survey,
1961, by V. I. Gerasimovskiy.

RUSSIAN, per, Dok Ak Nauk SSSR, Vol XXII,
No 5, 1936, pp ~~263~~-267.

Dept of Interior
QE3 E57 No 72

191,487

3c1 - Geophys

Apr 62

Reversible Catalytic Conversion of Normal
Butylenes Into Isobutylene, by D. M. Rudkovski,
E. K. Serebryakov, A. V. Frost, 6 pp.

RUSSIAN, thrice-mo per, Dok Ak Nauk SSSR, Vol IV,
No 8, 1936, pp 359-362.

SIA Tr R-746

Sci - Chemistry
Sep 57

53,027

Bernshtein, S. N.
ON THE QUADRATURE FORMULAS OF COTES
AND CHEBYSHEV. [1961] 7p. 3 refs.
Order from OTS or SLA \$1.10 62-10310

Trans. of Akad[emiya] Nauk SSSR. Doklady, 1937,
v. 14, no. 6, p. 323-326.

DESCRIPTORS: Polynomials, Inequalities, Theory.

(Unannounced)

62-10310

1. Bernshtein, S. N.

Office of Technical Services

The Production of Detonation in Explosives
Under the Action of a Thermal Impulse, by
A. P. Bolayev, 8 pp.

RUSSIAN, per, Dok Ak Nauk SSSR, Vol XVIII,
No 4, 5, 1937.

Available
in English
at LC

Sci

Aug 60

121,724

Oxidation of Phosphorus Vapor and Phosphine by
Oxygen in the Presence of Nitric Acid, by I. S.
Rosenblat, 28 pp.

RUSSIAN, per, Dok Ak Nauk SSSR, Ser Khim, 1938,
p 75, 99.

SIA R-3365

Sci

Aug 59

94,157

The Solubility Isotherm of the Ternary System SiO_2 -
 P_2O_5 - H_2O at 50° , by L. G. Berg, 8 pp.

RUSSIAN, per, Dok Ak Nauk SSSR, No 1, 1938
pp 161-166.

SLA R-2494

Sci
Apr 59

84, 429

Physicochemical Study of the Equilibrium of the
Aqueous Reciprocal System of Potassium and Ammonium
Nitrates, Monophosphates and Chlorides (Nitro-
phoska 1"), by A. G. Bergman, 7 pp.

RUSSIAN, per, Dok Ak Nauk SSSR, No 1, 1953,
pp 229-237.

SLA R-2510

Sci
Apr 59

84,757

Detonation in Air-Mixtures of Pentane and Hexane
in Tubes, by K. I. Shtsholkin, 5 pp.

RUSSIAN, Dok Ak Nauk SSSR, Vol XXII, No 3, 1938.

Available
in English
at LC

Sci

Aug 60

121,715

Qualitative Changes Taking Place in Rubber and
Resins in Kok-saghyz Roots in the Course of
Plant Development, by S. M. Mashtakov, 4 pp.

RUSSIAN, thrice-mo per, Dok Ak Nauk SSSR, Vol XIX,
No 4, 1938, pp 309-312.

Sci Trans Center RT 3204

Scientific - Biology

USSR

Economic - Plantdevelopment

Feb 56 31, 205

External Canaliculi of the Lateral Line of
Fishes, by D. K. Tret'yakov.

RUSSIAN, per, Dok Ak Nauk SSSR,
Vol XVIII, 1938, pp 483-485.

CSIRO

Sci - Biol
Jun 62

199, 630

Ther Thermal Explosion of Nitrous Oxide, by
Y. B. Zeldovich, B. I. Nacovlev, 5 pp.

RUSSIAN, per, Dok Ak Nauk SSSR, Vol XIX, No 9,
1938.

Available
in English
at IC

Sci

Aug 60

121,719

Preparation of Potassium Nitrate by Double
Decomposition of Potassium Chloride with
Nitric Acid at Low Temperatures and Concen-
trations of Nitric Acid, by V. I. Nikolayev
and A. G. Kogan, 16 pp.

RUSSIAN, per, Dok Ak Nauk SSSR, Ser Khim, 1938,
pp 925-940.

SLA R-2576

Sci

Aug 58

72,967

Geochemical and Mineralogical Methods of
Prospecting for Mineral Deposits, by A. Y.
Yeremian, 41 pp.

RUSSIAN, per, Doklady Akad Nauk SSSR, 1939.

SLA R 1600

Sci

Jul 58

68,777

Gerastimovskii, V. I.
CHKALOVITE, tr. by John Cieslewicz. 1961 [10]p.
Order from OTS or SLA \$1.10 62-13103
Trans. of Akademiya Nauk SSSR. Doklady [1939] v. 22,
no. 5, p. 263-267.

DESCRIPTORS: *Minerals, Beryllium, *Petrology,
Physical properties, Optical properties, Chemical
properties.

(Earth Sciences--Mineralogy, TT, v. 10, no. 10)

62-13103

I. Title: Chkalovite
I. Gerastimovskii, V. I.
II. Geological Survey,
Denver, Colo.

Office of Technical Services

On the Transition of the Combustion of Explosives
Into Detonation, by Y. B. Chariton, B. N.
Stepanov, 3 pp.

RUSSIAN, per, Dok Ak/SSSR, Vol XXIII, No 6,
1939.

Available
in English
at LC

Sci

Aug 60

121,721

Nikolaev, V.I.
DETERMINATION DE LA COMPOSITION DES PHASES
SOLIDES DE SYSTEMES QUADRUPLES A L'EQUILIBRE
(Determining the Composition of Solid Phases of Equili-
brous Quadruples Systems). 9p. 2refs, CNRS-VIII bis
536.

Order from OTS, ETC or CNRS \$0.80 TT-62-28311

Trans. (in French) of Akademiya Nauk SSSR. Doklady,
1939, v. 24, no. 6, p. 556-558.

DESCRIPTORS: *Phase studies, Solids, Chemical equi-
librium, Sodium compounds, Magnesium compounds,
Chlorides, Sulfates, Water.

(Chemistry--Physical, TT, v. 11, no. 6)

TT-62-28311

- I. Nikolaev, V.I.
- II. CNRS-VIII bis 536
- III. Centre National de la Recher-
che Scientifique, Paris

Office of Technical Services
European Translation Centre

On the Possibility of Separating Transverse Waves
during Seismic Prospecting by the Reflection
Method, by G. A. Gamburtsev.

RUSSIAN, *2121*
Izv. Ak. Nauk SSSR, Geogr i Geofiz, Ser. A
2, 1939, pp 155-173.

SIA R-2087

Sci

Aug 58

71,075

Thermal Inflammation and the Boiling Point of the
Given Explosive Compound, by A. F. Belayev,
N. A. Yusephovich, 3 pp.

RUSSIAN, Dok Ak Nauk SSSR, Vol XXVII, No 2, 1940.

Available
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Sci

Aug 60

121, 714

Tokhtuev. A. V.

INHERITANCE OF THE LENGTH OF GROWING PERIOD IN BARLEY. C.R.
Doklady) Acad, Sci. URSS, Vol. 27, pages 147-150, 1940.

1940, 1941

★ PL 480
ARS

apr 61

Constitution and Properties of Copper-Zirconium
Alloys, by S. A. Pogodin, I. S. Shumova, P. A.
Mugucheva, 4 p.

RUSSIAN, per. Dok Ak Nauk SSSR, 1940, Vol XXVII,
No 7, pp 670-672.

SLA 59-17968

Sci
Feb 60
Vol 2, No 10

108916

Nitrates

Physicochemical Investigation of the Aqueous Reciprocal System of Potassium Ammonium ~~Nitrates~~ and Monophosphates III. Polytherm of the Reciprocal System of Potassium and Ammonium Nitrates and Monophosphates, by P. F. Bochkarev, A. G. Bergman, 26 pp.

RUSSIAN, per, Dok Ak Nauk SSSR, Ser Khim, ~~1940~~ 1940, pp 379-395.

SLA R-2940

Sci

Jul 59

92, 396

5

The Solubility Diagram of Potassium Carbonate-Sodium
Carbonate-Water and Its Application to the Separation
of Potassium and Sodium Carbonates, by S. Z.
Makarov, M. P. Shul'gina, 21 pp.

RUSSIAN, per, Dok Ak Nauk SSSR, Ser Khim, 1940, p.
511 528

SLA R-2858

Sci

Jul 59

92, 416

Kitaigorodskii, I. I.
SCHUIMGLAS (Foam-glass). 7p. MTWL: 900.
(text in Dutch).
Order from OTS or ETC \$1.55

61-17609

Trans. of Akademiya Nauk SSSR, Doklady, 1940,
v. 26, p. 644-646.

DESCRIPTORS: *Porous glass, Production.

61-17609

- I. Kitaigorodskii, I. I.
- II. MTWL-900
- III. Stichting Moeilijk
Toegankelijke Wetenschap-
pelijke Literatuur

Office of Technical Services

The Physicochemical and Technological Analysis of
the Process of Decomposition of Phosphates by Means of
Nitric Acid, with Production of Fertilizers, by S. I.
Volfkovich, A. P. Belopolskiy, A. Loginova, 34 pp.

RUSSIAN, per, Dok Ak Nauk SSSR, Ser Khim, 1940, pp
705-724.

SLA R-2949

Sci

Jul 59

92,444

Double Salts of Mono- and Dipotassium Ortho-
phosphate, by L. G. Berg, G. B. Bokiy, 11 pp.

RUSSIAN, per, ⁴⁰Dok Ak Nauk SSSR, No 1, 1933,
pp ~~277-285~~ 277-285,

SLA R-2500

Sci
Apr 59

84,750

Heating Curves of Potassium Phosphates, by L. G.
Berg, 13 pp.

RUSSIAN, per, Dok Ak Nauk SSSR, Ser Khim, ~~pp~~ 1940,
pp 887-894.

~~STAR~~-2942

Sci

Jul 59

92, 390

Polarization of the Scattered Light in the
Spectra of Night Sky Fluorescence, by I. A.
Khvostikov, 6 pp.

Full text

RUSSIAN, per, Dok Ak Nauk SSSR, Vol XXVII, No 3,
1940, pp 217-220.

ATTC-2-55-8050/221

Scientific - Astronomy
OES/Dex
Aug 56

37,952.

Polarization of the Luminescence of the Night Sky in
the Ultraviolet Region of the Spectrum, by I. A.
Khvostikov, A. A. Shubin, 5 pp.

Full tr

RUSSIAN, per, Dok Ak Nauk, SSSR, Vol XXVII, No 3,
1940, pp 221-223.

ATTC-F-58-0058/III

Scientific - Astronomy
CTB/Dez
Aug 56

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FRANKEV, H. A.
SILKINOV, T. S.

Comptes Rendus De L'Academie Des Sciences De L'Union,
vol. 27, No. 5, 2 tables, 1100 words; 1960.

Coatings of Aluminum + Chromium and Chromium + Silver
Alloys Produced from the Vapors of Their Salts.

Butcher Trans, Order No. 1104, \$1.65.

Kazanskii, B. A., Serguienko, S. R., and
Zelinskii, N. D.
CONTACT CYCLIZATION OF PARAFFINIC HY-
DROCARBONS. [1961] [3]p. 8 refs.
Order from OTS or SLA \$1.10

61-20823

Reprint of [Akademiya Nauk SSSR]. Comptes (Doklady)
de l'Academie des Sciences de l'U. R. S. S., 1940,
v. 27, no. 7, p. 664-669.

DESCRIPTORS: *Hydrocarbons, *Catalysts, *Ethyl-
enes, Uranium compounds, Oxides, Molybdenum
compounds.

Chromic oxide deposited on silica gel possesses not
very high, but a sufficiently constant activity. Ura-
nium and molybdenum oxides deposited on alumina
possess a considerable activity which declines partic-
ularly strongly during the intervals between the daily
(Chemistry--Organic, TT, v. 7, no. 9) (over)

61-20823

I. Kazanskii, B. A.
II. Serguienko, S. R.
III. Zelinskii, N. D.

Office of Technical Services

The Oxidation of Carbon, by Z. F. Tchoukhanoff
(Chukhanov), 8 pp.

(file)
FRANCE, per, ~~Comptes Rendus~~ (Boklady) de l'Academie
des Sciences de l'URSS, Vol XXVIII, No 1, 1940,
pp 32-36.

CIA/FDD X-2098

Scientific - Chemistry
Jul 56 CTS/dax

36,524

Kussakov, M. M., Rebinder, P. A., and Zinchenko, K. E.

SURFACE PHENOMENA IN PETROLEUM FILTRATION PROCESSES. [1961] ip.

Order from OTS or SIA \$1.10

61-20388

Abstract trans. of [Akademiya Nauk SSSR]. Comptes Rendus (Doklady) de l'Academie des Sciences de l'U. R. S. S. 1940, v. 28, no. 5, p. 433-437.

DESCRIPTORS: *Petroleum, Processing, Surface properties.

(Engineering--Chemical, TT, v. 7, no. 1)

61-20388

I. Kussakov, M. M.

II. Rebinder, P. A.

III. Zinchenko, K. E.

Office of Technical Services

COMPTES RENDUS De L'Academie des Sciences de l'URSS
(doklady Vol 28 No 8 688-93 1940

Helicoidal Vortices in Application to the Aerodynamic
design of Propellers and Blowers by V. A. Konstantinov

F-TS-7475-RE

Balandin, A. A. and Liberman, A. L.
KINETICS OF DEHYDROGENATION OF SECONDARY
BUTYL ALCOHOL AND REVERSIBLE POISONING
OF COPPER CATALYSTS. [1961] 1p.
Order from OTS or SLA \$1.10

61-20387

Abstract trans. of [Akademiya Nauk SSSR], *Comptes
Rendus (Doklady) de l'Academie des Sciences de l'
U. R. S. S.* 1940, v. 28, no. 9, p. 794-799.

DESCRIPTORS: *Butanols, Dehydrogenation, *Copper
catalysts, Catalysts, Poisoning.

(Chemistry--Physical, TT, v. 6, no. 12)

61-20387

I. Balandin, A. A.
II. Liberman, A. L.

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Office of Technical Services

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Vol 28, #8

(1966)

On Helicoidal Vortices as Applied to Calculation
of Propellers + Wind Turbine Generators

V. A. Konstantinov

In service - ARIC

(Selenium - June 51)

Fusibility Diagrams of Ternary Systems of
Fluorides of Lithium, Sodium, Potassium and
Rubidium, by E. P. Dergunov, 7 pp.

RUSSIAN, thrice-no dex, Dok Ak Nauk SSSR, Vol
XVIII, 1940, pp 1369-1372.

AEC Tr 1860

Scientific - Chemistry
CIS/DEX

14,379

On the Conditions Governing Steady Burning of
Explosive Substances, by A. P. Belayev, 4 pp.

RUSSIAN. per, Dok Ak Nauk SSSR, Vol XXVIII,
No 8, 1940.

Available
in English
at LC

Sci

Aug 60

121,720

61-20390

[TRANSACTIONS (REPORTS) OF THE ACADEMY OF
SCIENCES OF THE USSR] 1940, VOL. 27, NO. 9:
[TABLE OF CONTENTS] AND SELECTED AB-
STRACT. [1961] 2p.
Order from OTS or SLA \$1.10 61-20390

Abstract trans. of ~~Akademiya Nauk SSSR~~. Comptes
Rendus (Doklady) de l'Academie des Sciences de
l'U.R.S.S. 1940, v. 27, no. 9, p. 950-955.

DESCRIPTORS: *Scientific research, Periodicals,
USSR, Substances. Liquids, Halogenation,
Electrolytes.

Contents:

Method of electrolytic halogenation of substances
insoluble in water, by N. A. Izgaryshev and
V. S. Polikarpov
(Chemistry--Physical, TT, v. 7, no. 1)

Office of Technical Services

Balandin, A. A. and Fedorov, V. S.
CATALYTIC DEHYDROGENATION OF CYCLOPENTANE IN THE PRESENCE OF CHROMIC OXIDE.
[1961] [1]p. 9 refs.
Order from OTS or SLA \$1.10 61-20820

Reprint of {Akademiya Nauk SSSR}. Comptes Rendus (Doklady) de l'Academie des Sciences de l'U.R.S.S., 1941, v. 30, no. 1, p. 21-22.

DESCRIPTORS: *Cyclopentanes, Pentanes, Dehydrogenation, Catalysts. Chromium compounds, Oxides, Catalysis.

The dehydrogenation of cyclopentane over chromic oxide takes actually place, this being in agreement with the point of view expressed in the paper published elsewhere. By the order of its magnitude, the rate of the dehydrogenation of cyclopentane is quite comparable (Chemistry--Organic, TT, v. 7, no. 4) (over)

61-20820

I. Balandin, A. A.
II. Fedorov, V. S.

Office of Technical Services

Scattering of Sound in Turbulent Flow,
by A. M. Obukhov.

RUSSIAN, per, Dok Akad Nauk SSSR,
Vol XXX, No 7, 1941, pp 616-620.
NASA TT F-9493

Sci-Phys
Feb 66

296,060

Gavrusevich, B. S. and Sarapulov, F. Ya.
CONCERNING THE CHANGE OF COLOR AND
OPTICAL PROPERTIES OF BERYLS ON HEATING
(K Voprosu ob Izmenenii Okraski i Opticheskikh
Svoistv Berillov pri Nagrevanii) tr. by W. John
Cieslewicz. Nov 61 [9]p. 8 refs.
Order from OTS or SLA \$1.10 62-15739

Trans. of Akademiya Nauk SSSR. Doklady, 1941,
v. 31, no. 8, p. 771-774.

DESCRIPTORS: *Silicates, *Beryllium, *Aluminum,
*Pegmatites, *Crystals, *Colors, Optics, Heating.

Beryls of different coloration, transparency and origin
on heating to 1200°C undergo changes affecting their
color, transparency and optical constants. Coloration
of beryls increases with heating in general. In tem-
peratures above 600°C the transparency and glassy
luster disappear, whereas refractive indices and the
(Earth Sciences--Mineralogy, TT, v. 7, no. 9) (over)

62-15739

I. Gavrusevich, B. S.
II. Sarapulov, F. Ya.
SI. Geological Survey,
Dnepropetrovsk.

Office of Technical Services

61-16940

Kobozev, N. I. and Kashtanov, L. I.
KINETICS AND ENERGETICS OF HIGH TEMPERA-
TURE CRACKING OF METHANE TO ACETYLENE.
[1961] 7p. 4 refs.
Order from OTS or SLA \$1.10

61-16940

Trans. of [Akademiya Nauk SSSR]. Comptes Rendus
(Doklady) de l'Academie des Sciences de l'U.R.S.S.,
1941, v. 33, p. 28-33.

DESCRIPTORS: *Methanes, Hydrocarbons, Decomposi-
tion, Hydrogenation, *Acetylenes, Synthesis.

A mathematical discussion of high temperature crack-
ing of methane to acetylene and experimental data are
reported pertaining to cracking of a mixture containing
71% methane under atmospheric pressure. The result-
ing gas contained about 7% acetylene and consumed
about 2.2 kw-hr per liter gas charged to the cracking
(Chemistry--Organic, TT, v. 6, no. 9) (over)

I. Kobozev, N. I.
II. Kashtanov, L. I.

165410

Office of Technical Services

62-16779

Vasserman, E. S. and Bedrintseva, A. B.
MECHANISM OF FORMATION OF VINYL ETHERS.
[1962] 3p. 5 refs.
Order from OTS or SLA \$1.10

62-16779

Trans. of Akademiya Nauk SSSR, Doklady, 1941, v. 33,
no. 1, p. 34-36.

DESCRIPTORS: *Vinyl radicals, *Ethers, Synthesis,
Reaction kinetics.

(Chemistry--Organic, TT, v. 9, no. 3)

I. Vasserman, E. S.
II. Bedrintseva, A. B.

Office of Technical Services

Kobozev, N. I. and Shneerson, A. L.
PHENOMENA OF CHEMICAL INDUCTION IN
THERMAL CRACKING OF METHANE. [1961] 6p.
5 refs.

Order from OTS or SLA \$1.10

61-16941

Trans. of [Akademiya Nauk SSSR]. Comptes Rendus
(Doklady) de l'Academie des Sciences de l'U.R.S.S.,
1941, v. 33, p. 217-222.

DESCRIPTORS: *Methanes, Hydrocarbons, Decomposi-
tion, Ethanes, Dehydrogenation, *Acetylenes,
Ethylenes, Synthesis.

Experimental conditions reported by various authors to
be required for obtaining the highest yields of un-
saturated hydrocarbons, especially acetylene, in
cracking of methane in mixture with ethane are tabu-
lated. A discussion of these data leads the authors to
the conclusion that the cracking of methane is induced
(Chemistry--Organic, TT, v. 6, no. 9) (over)

61-16941

I. Kobozev, N. I.
II. Shneerson, A. L.

K-H-1338c

00411

Office of Technical Services

Kobozev, N. I. and Eremin, E. N.
ACTIVATION CHARACTERISTICS OF THERMAL
CRACKING OF METHANE. [1961] 5p. 6 refs.
Order from OTS or SLA \$1.10 61-16942

Trans. of [Akademiya Nauk SSSR]. Comptes Rendus
(Doklady) de l'Academie des Sciences de l'U.R.S.S.,
1941, v. 33, p. 223-226.

DESCRIPTORS: *Methanes, Hydrocarbons, Decomposi-
tion, Heat of reaction, *Acetylenes, *Ethylenes,
Synthesis.

Correlation of data on cracking of methane obtained by
the authors and reported by other workers in the field
revealed the pronounced acceleration of the process
when the total and partial pressure of methane are re-
duced or methane is diluted. Among the individual steps
involved in the total process only those are favored
(Chemistry--Organic, TT, v. 6, no. 9) (over)

61-16942

I. Kobozev, N. I.
II. Eremin, E. N.

185412

Office of Technical Services

Stabilization of Spectrum Excitation Conditions in
the Arc Column, by I. B. Velyakov-Bodin, S. L.
Mandelshtam, 6 pp.

RUSSIAN, thrice-mo per, Dok Ak NaukSSSR, No 2, 3,
1941, pp 229-234.

AEC Tr 2720

SLA R-1417

May 58

63,174

The Reduction of Viscosity of Clay Suspensions.
From the Symposium on Viscosity of Liquids and
Colloids, by V. Baranov.

RUSSIAN, Dok Ak Nauk SSSR, Moscow, Department of
Technology, Institute of Mechanical Engineering,
Vol 1, 1941, pp 415-425.

Sci Museum Lib No/50/385⁶-
London

Sci -

The Dissolution of Nickel in Acids, by Y. Kolotyrkin,
A.M. Prunkin.

RUSSIAN, per, Dok Ak Nauk SSSR, Vol XXXIII, No 7-8,
1941, pp 445-449.

121
AMS-9152R

Sci

Aug 59

93, 540

Recherches sur la Chimie du Polonium. II. Obtention
du Polonium Hexavalent, (Research on the Chemistry
of Polonium II. Production of Hexavalent
Polonium), by A. G. Samartseva, 8 pp.

RUSSIAN to FRENCH, per, Dok Ak Nauk SSSR, Vol XXXIII,
No 9, 1944, pp 506-509.

Reverse Trans
CEA Tr-R-1044

Sci
May 61

Concerning the Change of Color and Optical
Properties of Beryls on Heating, by B. S.
Gavrusevich.

RUSSIAN, per, Dok Ak Nauk SSSR, Vol XXXI,
No 6, 1941, pp ~~771-774~~.

Dept of Interior
QE3 E57 No 65

191, 486

Sci - Geophys

Apr 62

The Phase Diagram of the Nickel-Niobium System, by
S. A. Fogodin, A. N. Selikmann, 6 pp.

RUSSIAN, per, Dok Ak Nauk SSSR, Vol XXXI, No 9,
1941, pp 895-897.

SLA Tr R-1149

Sci

Jun 58

65,886

61-20314

[TRANSACTIONS (REPORTS) OF THE ACADEMY OF
SCIENCES OF THE USSR] 1942, VOL. 35, NO. 2:
[TABLE OF CONTENTS] AND SELECTED ABSTRACT
[1961] 1p.

Order from OTS or SLA \$1.10

61-20314

Abstract trans. of Akademiya Nauk SSSR. Comptes
Rendus (Doklady) de l'Academie des Sciences de
l'U.R.S.S. 1942, v. 35, no. 2, p. 38-41.

DESCRIPTORS: *Scientific research, Periodicals,
USSR, Copper, Oxidization, Oxidizers, Chemical
reaction.

Content:

*Mechanism of copper passivation in alkaline solutions
of oxidizing agents, by A. G. Samartsev.

(Chemistry--Physical, TT, v. 7, no. 1)

Office of Technical Services

61-20221

Varov, A. A. and Romm, I. I.
OCCURRENCE OF STRONTIUM AND BARIUM IN
OIL FIELD WATER OF THE URAL-VOLGA REGION.
[1961] 1p. 1 ref.
Order from OTS or SLA \$1.10

61-20221

Abstract trans. of Akademiya Nauk SSSR Comptes
Rendus (Doklady) de l'Academie des Sciences de
l'U.R.S.S. 1942, v. 35, no. 4, p. 114-117.

DESCRIPTORS: Geochemistry, *Strontium, *Barium,
Determination, Oils, Water.

1. Title: Oil field waters
- I. Varov, A. A.
- II. Romm, I. I.

(Engineering--Chemical, TT, v. 7, no. 1)

Office of Technical Services

Itkina, E. S.
OCCURRENCE OF COPPER IN OIL FIELD WATERS.
[1961] 1p.

Order from OTS or SLA \$1.10

61-20315

Abstract trans. of ~~[Akademiya Nauk SSSR]~~. Comptes
~~Rendus (Fizicheskii)~~ de l'Academie des Sciences de
U.R.S.S., 1942, v. 35, no. 5, p. 149-152.

DESCRIPTORS: *Geochemistry, *Copper, Determina-
tion, Oils, Water.

[Engineering--Chemical, TT, v. 7, no. 1]

61-20315

1. Title: Oil field waters
1. Itkina, E. S.

Office of Technical Services

Mikhnovskaya, A. A. and From, A. V.
 Микновская, А. А. и Фром, А. В.
 Mikhnovskaya, A. A. and From, A. V.
 CATALYTIC ACTION OF ACTIVATED SILICA-
 ALUMINA: EFFECT OF TREATMENT WITH
 ACTIVATED CLAY UPON UNSATURATED COM-
 POUNDS CONTAINED IN CRACKED GASOLINE. [1961]

3p. 7 refs.

Order from OTS or SLA \$1.10

61-16655

Trans. of [Akademiya Nauk SSSR], Comptes Rendus
 (Doklady) de l'Academie des Sciences de l'U.R.S.S.,
 1942, v. 37, p. 221-222.

DESCRIPTORS: *Alumina-silica catalysts, Catalysis,
 *Hydrocarbons, Chemical effects, *Clays, *Gasoline.

Passing vapors of a cracked gasoline fraction boiling at
 90-122° C at a rate of flow of 0.25 ml liquid per ml
 catalytic zone per hour at 260° C through a column
 packed with Caucasian clay activated with sulfuric acid
 converted 40% of the unsaturated compounds of this
 (Engineering--Chemical), TT, v. 6, no. 9) (over)

61-16655

I. MIKHNOVSKAYA; A. A.
 II. FROM, A. V.
 III. Title: Effect...

167390

Office of Technical Services

Frost, A. V.

CATALYTIC ACTION OF ACTIVATED SILICA-
ALUMINA: ACTION OF ACTIVATED CLAY UPON
NORMAL OCTYL ALCOHOL AND CYCLOHEXANONE.
[1961] 4p. 3 refs.

Order from OTS or SLA \$1.10

61-16656

Trans. of [Akademiya Nauk SSSR]. Comptes Rendus
(Doklady) de l'Academie des Sciences de l'U.R.S.S.,
1942, v. 37, p. 223-225.

DESCRIPTORS: *Alumina-silica catalysts, Catalysis,
*Clays, *Alcohols, Dehydration, *Cyclohexanones,
Chemical effects.

Acid activated clay ignited at 240-290° was found to de-
hydrate octyl alcohol at 150-180°, but a temperature of
120° was insufficient for this reaction. The dehydration
gave 33% octenes, 17% gas and losses and 13% higher
olefins. In addition to polymerization, partial hydro-
(Engineering-Chemical, TT, v. 6, no. 9) (over)

61-16656

I. Frost, A. V.
II. Title: Action...

165391

Office of Technical Services

Gorbunov, N. S. and Baryshanskaya, F. S.
CHROMIUM PLATING OF STEEL AND IRON IN
THE GASEOUS PHASE. [1961] 1p.
Order from OTS or SLA \$1.10

61-20305

Abstract trans. of [~~Akademiya Nauk SSSR~~]. ~~Comptes~~
~~Rendus (Doklady) de l'Academie des Sciences de~~
~~l'U.R.S.S., 1942, v. 37, no. 9, p. 277-280.~~

DESCRIPTORS: Steel, Iron, *Chromium plating,
Plating, *Corrosion inhibition, *Vapor plating.

(Metallurgy--Corrosion, TT, v. 7, no. 1)

61-20305

I. Gorbunov, N. S.
II. Baryshanskaya, F. S.

Office of Technical Services

On the Problem of Diffuse Reflection of
Light by a Turbid Medium, by V. A.
Ambartsumyan, 7 pp.
RUSSIAN, per, Doklady Ak Nauk, Vol 38, 1943,
p 229. P 910118367
Smithsonian Institution
Astrophysical Observatory
No 7

321,657

Sci - Astronomy and Astrophysics
Mar 67

Pokrovskaya, E. S.
SOME HOMOLOGS OF CYCLOPENTYLBENZENE AND
CYCLOHEXYLBENZENE AND PRODUCTS OF THEIR
HYDROGENATION. [1961] 4p. 6 refs.
Order from OTS or SLA \$1.10 61-16983

Trans...of Akademiya Nauk SSSR. Comptes Rendus
(Doklady) de l'Academie des Sciences de l'U. R. S. S.,
1943, v. 39, p. 26-30.

DESCRIPTORS: Hydrocarbons, Synthesis, *Hydrogena-
tion, *Benzenes, Petroleum, Chemical analysis,
Catalysts, Pentyl radicals, Hexyl radicals.

Development of methods of chemical investigation of
petroleum kerosene and lubricating oils requires knowl-
edge of the individual hydrocarbons composing them.
Six new hydrocarbons of the series of cyclopentylben-
zene and cyclohexylbenzene were synthesized by con-
densing aromatics with cycloolefins in the presence of
(Engineering-Chemical, TT, v. 6, no. 8) (over)

61-16983

I. Pokrovskaya, E. S.

61-16983

Office of Technical Services

Rate of Deformation and Mechanical Properties of
Structures in Clay Suspensions, by K. F. Zhigach,
E. G. Kiater.

RUSSIAN, per, Dok Ak Nauk SSSR, Vol LXIX, 1942,
USSR, pp 813-815.

Assoc Tech Sv RJ-75

Sci - Chemistry \$6.30 (\$0.95)

Aug 54

17,137

(FDD 26210)

Propagation of a Sound Wave in a Vortex
Current, by A. M. Obukhov, 5 pp.

RUSSIAN, thrice-mo per, Dok Ak Nauk SSSR,
Vol XXXIX, No 2, Moscow, 1943, pp 46-48.

CIA/FDD/U-7675

USSR

Sci - physics

31,921

Genkel', N. A. and Kolotova, S. S.
A COMPARATIVE METHOD OF ASSESSING THE
DEGREE OF SALT RESISTANCE OF COTTON
(Sravnitelny Metod Otsenki Stepni Soleustoychivosti
Khlopchatnika). Mar 61 [7]p. 9 refs. RTS 1753.
Order from OTS or SLA \$1.10 61-19219

Trans. of Akademiya Nauk SSSR. Doklady, 1943,
v. 39, no. 5, p. 209-212.

DESCRIPTORS: *Cotton, Growth, Salts, Absorption,
Toxicity.

(Agriculture--Plant Cultivation, TT, v. 6, no. 1)

61-19219

- I. Genkel', N. A.
- II. Kolotova, S. S.
- III. RTS-1753
- IV. Department of Scientific
and Industrial Research
(Gr. Brit.)

161806

Office of Technical Services

Kobozev, N. L.
IS QUENCHING NECESSARY IN THE THERMAL
CRACKING OF METHANE TO ACETYLENE? [1961]
6p. 3 refs.

Order from OTS or SLA \$1.10

61-16979

Trans. of [Akademiya Nauk SSSR]. Comptes Rendus
(Doklady) de l'Academie des Sciences de l'U. R. S. S.,
1943, v. 39, p. 261-264.

DESCRIPTORS: *Methanes, Decomposition, Acetylenes,
Synthesis, Cooling.

Data are reported supporting the contention that crack-
ing of methane to acetylene does not require quenching
and that quenching is, as a rule, even harmful to this
process. Substitution of air cooling for water cooling
was without influence on the total yield of unsaturates,
but changed the ethylene-acetylene ratio in favor of the
latter. (Author)

(Chemistry--Organic, TT, v. 6, no. 7)

61-16979

L Kobozev, N. L.

Office of Technical Services

61-20300

[TRANSACTIONS (REPORTS) OF THE ACADEMY OF
SCIENCES OF THE USSR] 1943, VOL. 38, NO. 8.
[1961] 1p.

Order from OTS or SLA \$1.10

61-20300

Abstract trans. of ~~Academiya Nauk SSSR. Comptes~~
~~Rendus (Doklady) de l'Academie des Sciences de~~
~~l'U.R.S.S.~~, 1943, v. 38, no. 8, p. 270-276.

DESCRIPTORS: *Scientific research, Periodicals,
USSR, Spectrophotometers, Design, Ethylene-amines,
Potassium, Salts, Chemical reactions, Amines.

Contents:

Portable spectroscopic unit for analysis of cores from
oil wells, by S.A. Borovik

Interaction of ethylenediamine with zeise salts, by
Anna Gel'man.

(Chemistry--Physical, TT, v. 7, no. 1)

Office of Technical Services

61-16975

Liberman, A. L., Lukina, M. Yu. and others.
SYNTHESIS OF PARAFFINS CONTAINING A QUATERNARY CARBON ATOM WITH THE AID OF ZINC
ALKYLS. [1961] 4p. 14 refs.
Order from OTS or SLA \$1.10

61-16975

Trans. of Akademiya Nauk SSSR. Comptes Rendus
(Doklady) de l'Academie des Sciences de l'U. R. S. S.,
1963, v. 40, no. 2 [p. 70-72].

DESCRIPTORS: *Zinc compounds, Alkyl radicals,
*Hydrocarbons, Synthesis, *Hexanes.

Of the more frequently employed methods of synthesis
of neoparaffins interaction of tertiary alkyl magnesium
halide with allyl halide, followed by hydrogenation of
the olefin formed, and interaction of tertiary alkyl
halides with zinc dialkyls are the most advantageous.
The last mentioned method may be improved by em-
ployment of zinc dialkyls prepared from a mixture of
(Chemistry--Organic, TT, v. 6, no. 7) (over)

I. Liberman, A. L.
II. Lukina, M. Yu.

10174

Office of Technical Services

Synthesis of Ammonium Phosphates from Ferrous
Ferric Phosphates, by M. M. Bykov, 5 pp.

RUSSIAN, per, Dok Ak Nauk SSSR, Vol XL, 1943,
pp 75-78.

SLA R-3372

Sci

Aug 59

94,108

Balandin, A. A. and Marushkin, M. N.
FORMATION OF OLEFINS FROM HIGHER PARAP-
FINS. [1961] 5p. 9 refs.
Order from OTS or SLA \$1.10 61-16928

Trans. of Akademiya Nauk SSSR. Comptes Rendus
(Doklady) de l'Academie des Sciences de l'U. R. S. S.,
1943, v. 40, p. 254-256.

DESCRIPTORS: *Ethylenes, Synthesis, Hydrocarbons,
Decomposition, Waxes, Catalysts.

In a preliminary study catalytic cracking of paraffin
wax in the presence of a mixed chromium catalyst gave
results showing that at 450-500° dehydrogenation to
olefins definitely predominates over other reactions of
paraffin wax hydrocarbons under the conditions used.
(Author)

(Chemistry--Organic, TT, v. 6, no. 7)

61-16928

I. Balandin, A. A.
II. Marushkin, M. N.

1961

Office of Technical Services